

Notice of Allowability

Application No.

09/660,362

Examiner

Richard Chang

Applicant(s)

IWATSUKI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/19/2005.
2. ☒ The allowed claim(s) is/are 2,3,6-8,10-13,15,16,18-21 and 24-28, now renumbered as 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment

1. Applicants' amendments, see amendment, filed on 9/19/2005, with respect to Claims 2-3,6-8,10-13,15-16,18-21 and 24-28 have been fully considered and are persuasive. None of the previously cited reference teaches the claims 2-3,6-8,10-13,15-16,18-21 and 24-28.

Claims 1,4,5,9,14, 17, 22 and 23 had been canceled.

The new claim 28 is identical to the previously objected claim 17, which been canceled as to overcome the claim objection by correcting the claim number sequence.

Allowable Subject Matter

2. Claims 2-3,6-8,10-13,15-16,18-21 and 24-28 are allowed.

Examiner's Statement of Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The prior art along or in combination fails to teach or make obvious the following limitations:

"a band controller for providing an instruction to transmit a control frame that temporarily suspends frame transmission from said at least one other apparatus; and a transmitter connected to said at least one transmission medium for transmitting said control frame to said at least one transmission medium

according to the instruction from said band controller; wherein said network apparatus controls the transmission band volume of a frame transmitted from said at least one other apparatus to within a preset band volume; and wherein said band controller periodically instructs said transmitter to transmit said control frame.” as recited in the independent claims 2, 6 and 15,

“wherein said transmitter is provided to correspond to said at least one other apparatus, and includes at least one port connected to said at least one transmission medium; wherein said transmitter transmits said control frame from said at least one port; wherein said preset band volume is set to correspond to the total of the frame transmission band volume transmitted from said at least one other apparatus; and wherein said band controller instructs said transmitter to transmit said control frame when the total of the frame transmission band volume transmitted from said at least one other apparatus exceeds said preset band volume.” as recited in the independent claim 7, and

“wherein said preset band volume is set to correspond to each of some of said at least one other apparatus; and wherein said band controller instructs said transmitter to transmit said control frame to the port provided to correspond to said at least one other apparatus when the transmission band volume of a frame transmitted from said at least one other apparatus exceeds the band volume preset for said at least one other apparatus” as recited in the independent claim 8.

“a band controller for providing an instruction to transmit a control frame that temporarily suspends frame transmission from said at least one other apparatus; and wherein said network apparatus includes at least one said band controller that corresponds to each of some of said at least one port.” as recited in the independent claim 10.

“a band controller for providing an instruction to transmit a control frame that temporarily suspends frame transmission from said at least one other apparatus; and wherein said network apparatus includes only one unit of said band controller” as recited in the independent claim 11.

9 “wherein said preset band volume is set to correspond to the total of the frame transmission band volume transmitted from said plurality of apparatus; and wherein said band controller instructs said transmitter to transmit said control frame if the total of said frame transmission band volume exceeds said preset band volume” as recited in the independent claim 16.

“wherein said preset band volume is set for each of said plurality of transmission media in such a way as to correspond to the transmission band volume of a frame transmitted via each of said plurality of transmission media; and wherein if the transmission band volume of a frame transmitted via any one of said plurality of transmission media exceeds said preset band volume that corresponds to said any one transmission medium, said band controller instructs said transmitter to transmit said control frame from a port connected to said any one transmission medium” as recited in the independent claim 18.

“wherein said transmitter includes at least one link aggregation sub-layer and a plurality of MAC control units; wherein said at least one aggregation sub-layer receives an instruction from said band controller and distributes said instruction to each of said plurality of MAC control units; and wherein each of said plurality of MAC control units corresponds to each of said plurality of ports, and transmits said control frame from each of said plurality of ports 3according to the instruction from said band controller” as recited in the independent claim 19,
“wherein at the step of transmitting said control frame, said control frame is periodically transmitted by said at least one second apparatus; and wherein at said suspending step, frame transmission is periodically suspended according to said control frame that is periodically received” as recited in the independent claim 24, and
“communication band volume possessed by said at least one transmission medium; and wherein at the step of transmitting said control frame, said control frame is transmitted when the transmission band volume of a frame transmitted from said at least one first apparatus exceeds said set band volume” as recited in the independent claim 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RKC

rkc

Richard Chang
Patent Examiner
Art Unit 2663

Ricky Ngo
RICKY NGO
PRIMARY EXAMINER

10/12/05